NIKKI K. LYTLE, PhD

Assistant Professor
Department of Surgery, Division of Surgical Oncology
Department of Pharmacology and Toxicology
Medical College of Wisconsin Cancer Center
Co-director, Surgical Oncology Tissue Bank
LaBahn Pancreatic Cancer Program
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EDUCATION

Ph.D. in Biomedical Sciences.
University of California, San Diego, CA. September, 2018
G.P.A.: **3.98**

Bachelor of Arts. Willamette University, Salem, OR. May 2010
Majors: **Biology** and **Religious Studies**
Minors: **Chemistry** and **Classical Studies**
G.P.A.: **3.86** (Magna Cum-Laude)

RESEARCH AND PROFESSIONAL EXPERIENCE

2022 Oct – Current: **Medical College of Wisconsin**, Milwaukee WI
Assistant Professor, Department of Surgery, Division of Surgical Oncology
Medical College of Wisconsin Cancer Center

2018 Nov – 2022 Oct: **Salk Institute for Biological Studies**, La Jolla CA
Postdoctoral Fellow, Dr. Geoffrey Wahl Laboratory

2012 Sep – 2018 Oct: **University of California San Diego**, La Jolla CA
PhD, Biomedical Sciences Doctoral Program, Dr. Tannishtha Reya Laboratory

2010 May – 2012 Sep: **Legacy Research Institute**, Portland OR
Research Assistant, Robert S. Dow Neurobiology Laboratories, Dr. Detlev Boison Laboratory

2008 Sep – 2010 May: **Willamette University**, Salem OR
Science Collaborate Research Program, Dr. Jason Duncan Laboratory

2008 Fall: **Nunhems USA** Research Technologist, Salem OR

2008 Summer: **Oregon State University Central Oregon Agriculture Research Center** Intern, Madras OR

RESEARCH GRANTS, AWARDS, AND CONTRACTS

Active

1. American Gastroenterological Association (AGA)-Bern Schwarz Family Fund Research Scholar Award in Pancreatic Cancer
   Lytle (PI); $300,000 in direct costs
   "Intercepting metastasis through disruption of the pro-metastatic niche"
   07/2025 – 06/2028

2. We Care Fund for Medical Innovation and Research, MCW, Department of Surgery
   Lytle (PI); $50,000 in direct costs
   "Systematic targeting of Midkine as a novel approach for preventing pancreatic cancer liver metastasis"
   09/2024 – 08/2025

3. Vince Lombardi Cancer Foundation
   Lytle (PI); $80,000 in direct costs

"Disabling metastasis through blockade of desmoplastic stroma formation"
01/2025 – 12/2025

4. Research Affairs Committee New Faculty Pilot Grant, MCW
   Lytle (PI); $35,000 in direct costs
   "The role of chemotherapy-induced liver damage in pancreatic cancer liver metastasis"
   01/2025 – 12/2025

5. NIH National Cancer Institute R01
   Todd Miller (PI) and Lytle (Co-I)
   "Uncovering the basis and implications of lineage plasticity in breast cancer"
   01/2025 – 12/2026

6. NIH National Cancer Institute R01
   Thomas McFall (PI) and Lytle (Co-I)
   "Overcoming intrinsic resistance to targeted therapies in colorectal cancer"
   09/2024 – 08/2029

In Review

1. Lustgarten Foundation – American Association for Cancer Research (AACR) Career Development Award
   "Preventing liver metastasis by disrupting the pro-metastatic liver niche"
   Lytle (PI)

2. NIH/NCI R01
   "Regulation of cell plasticity in breast tumorigenesis"
   Lytle (PI)

Completed

1. American Cancer Society – MCW Cancer Center Institutional Research Grant (ACS-IRG)
   Lytle (PI); $40,000 in direct funds
   01/2024 – 12/2024
   "The role of chemotherapy-induced cell plasticity in second primary breast cancers"
2. Breast Cancer Research Foundation (BCRF)
   Geoffrey Wahl (PI) and Lytle (Co-I); $60,000 in direct funds to Lytle lab
   10/2023 – 09/2024
   "Molecular developmental approach to classifying and treating breast cancer"
3. Centene Charitable Foundation
   Lytle (PI); $50,000 in direct funds
   09/2023 – 08/2024
   "Elucidating the Liver Metastatic Niche: the Evolving Microenvironment Throughout Pancreatic Cancer Metastasis"
4. Sky Foundation Grant
   Lytle (PI); $100,000 in direct funds
   05/2020 – 12/2023
   "Interception of pancreatic cancer metastasis by targeting tissue wound repair"
5. Salk Innovation Grant
   MPI: Nikki Lytle and Geoffrey Wahl; $95,000 in direct funds
   01/2021 – 01/2022
   "*Contact tracing:* A tool for tracking cell-cell contact dependent phenotype alterations"
6. Hope Funds for Cancer Research (HFCR) Fellowship
   Lytle (PI)
   11/2020 – 10/2022
   "Interception of pancreatic cancer metastasis by targeting tissue wound repair"
7. NIH/NCI T32 Salk Institute Cancer Training Grant

11/2018 – 10/2020
"The role of obesity in mammary epithelium cell state and breast cancer initiation"

8. Salk Women & Science Special Awards Initiative Recipient
   Lytle (PI)
   03/2019 – 02/2020
   "Tracking cellular plasticity during tumorigenesis by intravital imaging"
9. NIH/NCI Ruth L. Kirschstein F31 Predoctoral Individual NRSA Fellowship
   Lytle (PI)
   04/2016 – 03/2018
   "Stem cell signals in pancreatic adenocarcinoma metastasis and therapy resistance"
10. NIH/NCI T32 UCSD Pharmacological Sciences Training Grant
    08/2013 – 07/2015
11. Howard Hughes Medical Institute Med-into-Grad Initiative
    09/2013 – 03/2014

HONORS AND AWARDS

10/2024 Mellowes Center – Oxford Nanopore Technologies Discovery and Innovation Pilot Award, MCW
05/2023 Rising Star Award, Midwest Tumor Microenvironment Meeting, Purdue University
11/2021 American Pancreatic Association 2021 Young Investigator Award, Miami FL
09/2019 2019 Outstanding Dissertation Award, Biomedical Sciences, University of California San Diego
06/2017 Geographic Management of Cancer Health Disparities Region 3 Travel Funds Award
06/2017 Cold Spring Harbor Laboratory Workshop Travel Award, Cold Spring Harbor NY
02/2017 Gordon Research Seminar Individual Travel Award, Barga-Gallicano Italy
2016 Featured Alumni, Willamette University Biology Department, Salem OR
09/2015 Best Poster, UCSD Biomedical Sciences Annual Retreat, Palm Springs CA
2006 – 2010 Willamette University Honors/Scholarships

Magna Cum-Laude	Phi Beta Kappa Biological Honor Society
Department of Biology Honors	Department of Religious Studies Honors
Mortar Board	Dean's List, 5 semesters
College Honors	Tri Beta Biological Honor Society
Willamette Compass Scholarship	Martha Springer Biology Scholarship
Department of Biology Travel Award	Class of 1933 Scholarship
Collins Scholarship	Lilly Personal Development Grant
T. Kay Yeoman Scholarship	Vera M. Armstrong Scholarship
Morton and Jessie Peck Scholarship	Leupold & Stevens Foundation Scholarship
Elmer and Grace Goudy Scholarship	Ernst and Selma Thoman Scholarship

TEACHING AND MENTORING EXPERIENCE

Postdoctoral Fellows

Priyanga Jayakrishnan, Postdoctoral Fellow, 08/2023 – Current

Recipient, Advancing a Healthier Wisconsin Postdoctoral Seed Grant, 01/2025 – 12/2026
Poster presentation: MCW Annual Research Poster Session Participant, 11/2024
Voted best poster presentation by faculty
Poster presentation: WiSER Conference, Milwaukee WI, 10/2024
Selected oral presentation: MCW Annual Postdoc Research Symposium, Milwaukee WI, 09/2024
Voted best oral presentation by faculty and postdocs
Poster presentation: PancMidwest Meeting, Chicago IL, 05/2024
Poster presentation: Pharmacology & Toxicology Research Retreat, Milwaukee WI, 06/2023

Graduate Students

Isabella Facchine, Graduate Student, Interdisciplinary Program, MCW, 01/2024 – Current

Poster presentation: 7th Annual Graduate Student Association Symposium, Milwaukee WI, 03/2025

Voted best poster presentation by faculty

Poster presentation: MCW Annual Research Poster Session Participant, Milwaukee WI, 11/2024

Poster presentation: MCW Cancer Center Annual Retreat, Milwaukee WI, 11/2024

Poster presentation: Pharmacology & Toxicology Research Retreat, Milwaukee WI, 06/2023

Omar Cortez-Toledo, Graduate Student, Interdisciplinary Program, MCW, 02/2023 – Current

Poster presentation: MCW Annual Research Poster Session Participant, 11/2024

Poster presentation: MCW Cancer Center Annual Retreat, Milwaukee WI, 11/2024

Poster presentation: WiSER Conference, Milwaukee WI, 10/2024

Recipient, MCW Cancer Center Graduate Student Fellowship, 11/2023 – 10/2025

Poster presentation: Midwest Tumor Microenvironment Meeting, Purdue University, 05/2023

Research Technicians

Kai Liptow, Research Assistant, 06/2023 – Current

Poster presentation: WiSER Conference, Milwaukee WI, 10/2024

Undergraduate Students

Parnian Vakili, MCW-University of Wisconsin Milwaukee Joint Cancer Research Program, 10/2023 – Current

Poster presentation: National Conference on Undergraduate Research (NCUR), Pittsburgh PA, 04/2025

Recipient, MCWCC-UWM Undergraduate Research Grant, 06/2024 – 12/2024

Poster presentation: WiSER Conference, Milwaukee WI, 10/2024

Poster presentation: MCW-UWM Undergraduate Research Program Poster Session, 08/2024

Rotation, summer, and part-time students

Alexander Eng, MCW Medical School student, 12/2024 – current

Recipient, SAMS/MSSRP competitive research summer fellowship, 06/2025 – 08/2025

Troy Biermann, MCW Medical School student, 11/2024 – current

Recipient, SAMS/MSSRP competitive research summer fellowship, 06/2025 – 08/2025

Krisha Pakala, SUPREMES Brookfield Central High School program, Summer 2024, Spring 2025

Anooj Arkatkar, Medical Scientist Training Program (MD/PhD), Medical College of Wisconsin, Summer 2024

Archi Sundar Paul, Interdisciplinary Program rotation, Medical College of Wisconsin, Winter 2023

Kathren Kaminski, Interdisciplinary Program rotation, Medical College of Wisconsin, Fall 2023

Mariah Williams, Student-Centered Pipeline to Advance Research in Cancer Centers (SPARCC), Summer 2023

Poster presentation: SPARCC Cancer Research Summit, 08/2023

Brett Mueller, Medical Student, Medical College of Wisconsin, Winter 2023

Graduate Student Committees

Mohamed Gadelkarim, Interdisciplinary Program, MCW, Gustavo Leone Laboratory, 10/2024 – Current

Huda Zayed, Interdisciplinary Program, MCW, Daochun Sun Laboratory, 08/2024 – Current

Elisabeth Solis, Interdisciplinary Program, MCW, Michael Dwinell Laboratory, 04/2024 – Current

Maria Poimenidou, Interdisciplinary Program, MCW, Michael Dwinell Laboratory, 10/2023 – Current

Donovan Drouillard, Medical Scientist Training Program, MCW, Michael Dwinell Laboratory, 09/2023 – Current

Daniel Dorbin, Interdisciplinary Program, MCW, Thomas McFall Laboratory, 8/2023 – Current

Aigbe Ohihoin, Cell and Developmental Biology, MCW, Victor Jin Laboratory, 08/2023 – Current

Past Mentees

Liliana Zamora, Research Assistant, Salk Institute for Biological Studies, 03/2022 – 10/2022

Nick Enriquez, Westview High School Summer Student, Salk Institute for Biological Studies, Summer 2020

Tammy Gilderman, Undergraduate Student, University of California San Diego, 01/2017 – 09/2019

Other Teaching/Mentoring Experience

2024 Foundations in Biomedical Sciences II (Fall), IDP PhD program, MCW

2024 Current Topics in Cancer Biology lecturer (Fall), IDP PhD program, MCW

2024 Advance from Postdoc lecture series: "*How to write a research statement*", MCW

2023 Research Deconstruction guest lecture, Beloit College

Tumor evolution as a hurdle for cancer treatment: How do we study it and (hopefully) outsmart it?

2020 Mentoring Training: 7-part series, Salk Institute

2016 Lead Instructional Assistant: *The Cell*, University of California San Diego
2010 Tutor: *Cell Biology and Genetics,* Willamette University
2009 – 2010 Laboratory Assistant: *Gene Structure and Function*, Willamette University (2 semesters)
2009 – 2010 Laboratory Assistant: *Molecular Genetics*, Willamette University (2 semesters)
2008 Laboratory Assistant: *Animal Physiology*, Willamette University

PROGRAMMATIC LEADERSHIP

09/2025 Co-Director, Community & Cancer Science Network (CCSN) Research & Community Scholars Program
08/2023 – Current: Co-Director, Surgical Oncology Tissue Bank, Medical College of Wisconsin
Longitudinal, annotated biorepository which collects blood and tissue samples for banking fixed, frozen, and viable specimens
08/2023 – Current: Organizer, MCW Pancreas Disease Oriented Team monthly seminar series
09/2023 – 06/2024: Co-organizer, MCW Breast Disease Oriented Team monthly seminar series

PROFESSIONAL AND VOLUNTEER SERVICES

Institutional Committees

09/2023 – Current Geospatial Epidemiology & Outcomes Advisory Committee, MCW
05/2024 – 04/2027 Institutional Biosafety Committee (IBC) appointed member, MCW, 3-year term
11/2023 – 04/2024 Search committee member for Cancer Biologist
Department of Pharmacology and Toxicology, MCW
11/2023 – 04/2024 Search committee member for Pancreas Cancer Surgeon Scientist
Department of Surgery, Division of Surgical Oncology, MCW
07/2023 – 06/2026 Elected member, Graduate Studies Council Awards Committee, MCW, 3-year term
12/2019 – 10/2022 Organizer, monthly Salk Featured Fellows Series, Salk Institute Society of Research Fellows
10/2021 Organizer, Salk Science at the Seaside annual symposium
12/2014 – 04/2015 Selected student representative, UCSD Biomedical Sciences Graduate Program admissions
09/2013 – 05/2015 Welcome committee organizer, UCSD Biomedical Sciences Graduate Program
09/2012 – 05/2013 Elected student council, first-year graduate students, UCSD Biomedical Sciences
08/2009 – 11/2009 Selected student representative, hiring committee for microbiology, Willamette University
03/2009 – 05/2009 Selected student representative, hiring committee for physiology, Willamette University

Science Outreach

03/2025 Presenter, Marquette University Lacrosse fundraiser for pancreatic cancer research, Milwaukee WI
01/2025 Guest scientist, FIRST Tech Challenge Elmbrook High School all-girls robotics team interview series
https://www.youtube.com/watch?v=wiqariXm2Mw
12/2024 Guest scientist with Vince Lombardi Cancer Foundation, WTMJ radio station, Milwaukee WI
11/2024 *The Word on Medicine* Podcast, guest scientist
https://podcasts.apple.com/us/podcast/pancreatic-cancer-update/id1342298832?i=1000678659216
11/2024 Invited speaker, Sky Foundation Annual Night Sky Gala, Detroit MI
08/2024 Lab tour volunteer for Pancreatic Cancer Survivors, Power of Us event, Seena Magowitz Foundation
03/2024 Stars in Our Sky: Sky Foundation Lecture Series
"The unintended consequences of treating pancreatic cancer: Can you protect your liver?"
https://www.youtube.com/watch?v=9Ycd2leuhTc
11/2023 *Pancreas School* presented by the MCW LaBahn Pancreatic Cancer Program
"Tour a pancreatic cancer research lab with Nikki Lytle"
https://www.youtube.com/watch?v=feb_ZiYy0iQ
08/2023 Lab tour volunteer for Pancreatic Cancer Survivors, Power of Us event, Seena Magowitz Foundation
02/2023 *The Voice of Pancreatic Cancer* Senna Magowitz Foundation Podcast, guest scientist
https://www.youtube.com/watch?v=SXQwXbBGnCE&t=115s
11/2022 *The Word on Medicine* Podcast, guest scientist
https://podcasts.apple.com/us/podcast/pancreatic-cancer-

awareness/id1342298832?i=1000586816365

11/2022 Pancreatic Cancer Awareness Month Patient Lecture Series:
"Pancreatic Cancer: Of Mice and Men"
07/2021 Scientist, Project LEAD Institute, Breast Cancer Advocacy Training
04/2021 Sky Foundation 13th Annual Women's Event, invited speaker:
"Can we prevent pancreatic cancer metastasis? *Lessons from a mediocre gardener*"
https://www.youtube.com/watch?v=YyTE-vnT9tY
02/2021 *Where Cures Begin* Salk Podcast, guest scientist
https://www.youtube.com/watch?v=Tf2-sF5SiT8
02/2021 March of Dimes High School Science Week, volunteer science panelist, Salk Institute
02/2021 Monarch High School for underprivileged youth, Speaker:
"Seed and soil: how our body and environment influences cancer"
02/2020 March of Dimes High School Science Week, volunteer science panelist, Salk Institute
11/2019 Salk Scientist representative, Business and Youth Expo, San Diego CA
10/2019 Invited speaker, Salk Women & Science donor event
07/2019 Scientist, Project LEAD Institute, Breast Cancer Advocacy Training
07/2019 Invited speaker, Salk Women & Science donor event
03/2019 Science Advocate, Susan G. Komen San Diego More Than Pink Annual Fundraiser, San Diego CA
03/2019 Fast Pitch at Komen San Diego's Annual Metastatic Breast Cancer Conference, San Diego, CA
"Spying on the Terrorist Within: New Insights into Cancer Metastasis Using Intravital Imaging"

Community Volunteering

04/2023 – Current: Lytle lab monthly volunteering, Milwaukee Women's Shelter
07/2021 – 09/2021 Organizer, Salk Research Fellows community cleanup project

Ad-hoc Reviewer

NPJ Precision Oncology Cancers

PUBLICATIONS

1. Vallmajo-Martin Q, Ma Z, Srinivasan S, Murali D, Dravis C, Mukund K, Subramaniam S, Wahl GM, **Lytle NK**. (2024) The molecular chronology of mammary epithelial cell fate switching. *BioRXiv.* doi:https://doi.org/10.1101/2024.10.08.617155.
2. Rahbhandari N, Hamilton M, Quintero CM, Ferguson LP, Fox R, Schurch CM, Wang J, Nakamura M, **Lytle NK**, McDermott M, Diaz E, Pettit H, Kritzik M, Han H, Cridebring D, Wen KW, Tsai S, Goggins MG, Lowy AM, Wechsler-Reya RJ, Von Hoff DD, Newman AM, Reya T. (2023) Single-cell mapping identifies MSI+ cells as a common origin for diverse subtypes of pancreatic cancer. ***Cancer Cell.*** S1535-6108(23)00324-0.
3. Ferguson LP, Gatchalian J, McDermott M, Nakamura M, Chambers K, Rajbhandari N, **Lytle NK**, Rosenthal S, Hamilton M, Albini S, Wartenberg M, Zlobec I, Galvan J, Karamitopoulou E, Vavinskaya V, Wascher A, Lowy A, Schurch C, Puri PL, Bruneau B, Hargreaves D, Reya T. (2023) Smarcd3 is an epigenetic modulator of the metabolic landscape in pancreatic ductal adenocarcinoma. ***Nature Communications.*** 14(1):292.
4. Ma Z*, **Lytle NK* (co-first author)**, Ramos C, Naeem RF, Wahl GM. (2022) Single-cell transcriptomic and epigenetic analyses of mouse mammary development starting with the embryo. ***Methods Mol Biol.*** 2471:49-82.
5. Gubbala VB, Jytosana N, Trinh VQ, Maurer HC, Naeem RF, **Lytle NK,** Ma Z, Zhao S, Lin W, Han H, Shi Y, Hunter T, Singh PK, Olive KP, Tan MCB, Kaech SM, Wahl GM, DelGiorno KE. (2022) Eicosanoids in the pancreatic tumor microenvironment – a multicellular, multifaceted progression. ***Gastro Hep Advances.*** 1(4):682-697.
6. Ma Z, **Lytle NK**, Chen B, Jyotsana N, Novak SW, Cho CJ, Caplan L, Ben-Levy O, Neininger AC, Burnette DT, Trinh VQ, Tan MCB, Patterson EA, Aroojo E Drigo R, Giraddi RR, Ramos C, Means AL, Matsumoto I, Manor U, Mills JC, Goldenring JR, Lau KS, Wahl GM, DelGiorno KE. (2021) Single-cell transcriptomics reveals a conserved metaplasia program in pancreatic injury. ***Gastroenterology.*** S0016-5085(21)03665-9.
7. Spinler K, Bajaj J, Ito T, Zimdahl B, Hamilton M, Ahmadi A, Koechlein CS, **Lytle N**, Kwon HY, Anower-E-Khuda F, Sun H, Blevins A, Weeks J, Kritzik M, Karlseder J, Ginsberg MH, Park PW, Esko JD, Reya T. (2020) A stem cell reporter based platform to identify and target drug resistant stem cells in myeloid leukemia. ***Nature Communications.*** 11(1):5998.

8. DelGiorno KE, Chung C-Y, Vavinskaya V, Maurer CH, Novak SW, **Lytle NK,** Ma Z, Giraddi RR, Wang D, Fang L, Naeem RF, Andrade LR, Ali WH, Tseng H, Tsui C, Gubbala VB, Ridinger-Saison M, Ohmoto M, Erikson GA, O'Connor C, Shokhirev MN, Hah N, Urade Y, Matsumoto I, Kaech SM, Singh PK, Manor U, Olive KP, Wahl GM. (2020) Tuft cells inhibit pancreatic tumorigenesis in mice by producing prostaglandin D2. ***Gastroenterology.*** S0016-5085(20)34999-4.
9. Li Y-C, **Lytle NK,** Gammon ST, Wang L, Hayes TK, Sutton MN, Bast RC, Der CJ, Piwnica-Worms D, McCormick F, Wahl GM. (2020) Analysis of RAS protein interactions in living cells reveals a mechanism for pan-RAS depletion by membrane targeted RAS binders. ***Proc Natl Acad Sci USA.*** 117(22):12121-12130.
10. Lusardi TA, **Lytle NK,** Gebril HM, Boison D. (2020) Effects of preinjury and postinjury exposure to caffeine in a rat model of traumatic brain injury. ***J Caffeine Adenosine Res.*** 10(1):12-24.
11. Bersini S, **Lytle NK,** Schulte R, Huang L, Wahl GM, Hetzer M. (2020) Nup93 regulates breast tumor growth by modulating proliferation and actin cytoskeleton remodeling. ***Life Science Alliance.*** 3(1):e201900623.
12. **Lytle NK*,** Ferguson LP*, Rajbhandari N, Gilroy K, Fox RG, Deshpande A, Schurch CM, Hamilton M, Robertson N, Lin W, Noel P, Wartenberg M, Zlobec I, Eichmann M, Galvan JA, Karamitopoulou E, Gilderman T, Esparza LA, Shima Y, Spahn P, French R, Lewis N, Fisch KM, Sasik R, Rosenthal SB, Kritzik M, Von Hoff D, Han H, Ideker T, Deshpande AL, Lowy AM, Adams P, Reya T. (2019) A multiscale map of the stem cell state in pancreatic cancer. ***Cell.*** 177(3):572-586. ***contributed equally**
13. Shi Y, Gao W*, **Lytle NK*,** Huang P, Dann AM, Ridinger M, DelGiorno KE, Erikson G, Sun H, Meisenhelder J, Terenziani E, Santisakultarm P, Manor U, Leblanc M, Umetsu SE, Collisson EA, Lowy AM, Reya T, Donahue TR, Downes M, Wahl GM, Evans RM, Pawson T, Tian R, Hunter T. (2019) Targeting LIF-mediated paracrine communication for pancreatic cancer therapy. ***Nature.*** 569(7754):131-135. ***contributed equally**
14. **Lytle NK,** Barber A, Reya T. (2018) Stem cell fate in cancer growth, progression and therapy resistance. ***Nature Reviews Cancer.*** 18(11):669-680.
15. Dravis C*, Chung C-Y*, **Lytle NK,** Herrera-Valdez J, Luna G, Trejo CL, Reya T, Wahl GM. (2018) Epigenetic and transcriptomic profiling of mammary gland development and tumor models disclose regulators of cell state plasticity. ***Cancer Cell.*** 34(3):466-482. ***contributed equally**
16. Todoric J, Antonucci L, Di Caro G, Li N, Wu X, **Lytle NK,** Dhar D, Banerjee S, Fragman JB, Browne CD, Umemura A, Valasek MA, Kessler H, Tarin D, Goggins M, Reya T, Diaz-Meco M, Moscat J, Karin M. (2017) Stress-activated NRF2-MDM2 cascade controls neoplastic progression in pancreas. ***Cancer Cell.*** 32(6):824-839.
17. Bajaj J*, Konuma T*, **Lytle NK**, Kwon HY, Ablack JN, Cantor JM, Rizzieri D, Chuah C, Oehler VG, Broome EH, Ball ED, van der Horst EH, Ginsberg MH, Reya T. (2016) CD98-mediated adhesive signaling enables the establishment and propagation of acute myelogenous leukemia. ***Cancer Cell*.** 30(5):792-805. ***contributed equally**
18. Fox RG*, **Lytle NK* (co-first author)**, Jaquish DV, Park FD, Ito T, Bajaj J, Koechlein CK, Zimdahl B, Yano M, Kopp J, Kritzik M, Sicklick J, Sander M, Grandgenett PM, Hollingsworth MA, Shibata S, Pizzo D, Valasek M, Sasik R, Scadeng M, Okano H, Kim Y, MacLeod AR, Lowy AM, Reya T. (2016) Image based detection and targeting of therapy resistance in pancreatic adenocarcinoma. ***Nature*.** 534(7607):407-11. ***contributed equally**
19. Kwon HY, Bajaj J, Ito T, Blevins A, Konuma T, Weeks J, **Lytle NK**, Koechlein CS, Rizzieri D, Chuah C, Oehler VG, Sasik R, Hardiman G, Reya T. (2015) Tetraspanin 3 is required for the development and propagation of acute myeloid leukemia. ***Cell Stem Cell.*** 17(2):152-164.
20. Shen HY, van Vliet EA, Bright KA, Hanthorn M, **Lytle NK**, Gorter J, Aronica E, Boison D. (2015) Glycine transporter 1 is a target for the treatment of epilepsy. ***Neuropharmacology.*** 99:554-565.
21. Wu X, Zhang W, Font-Burgada J, Palmer T, Hamil AS, Biswas SK, Poidinger M, Borcherding N, Xie Q, Ellies LG, **Lytle NK**, Wu LW, Fox RG, Yang J, Dowdy SF, Reya T, Karin M. (2014) Ubiquitin-conjugating enzyme Ubc13 controls breast cancer metastasis through a TAK1-p38 MAP kinase cascade. ***Proc Natl Acad Sci U.S.A.*** 111(38):13870-13875.
22. Yoo HS, Qiao L, Bosco C, Leong LH, **Lytle N**, Feng GS, Chi NW, and Shao J. (2014) Intermittent cold exposure enhances fat accumulation in mice. ***PLoS One.*** 9(5):e96432.
23. Williams-Karnesky RL, Sandau US, Lusardi TA, **Lytle NK**, Farrell JM, Pritchard EM, Kaplan DL, and Boison D. (2013) Epigenetic changes induced by adenosine augmentation therapy prevent epileptogenesis. ***J Clin Invest*.** 123(8):3552-3563.
24. Duncan JE, **Lytle NK**, Zuniga A, and Goldstein LSB. (2013) The microtubule regulatory protein Stathmin is required to maintain the integrity of axonal transport in *Drosophila.* ***PLoS ONE.*** 8(6):e68324.
25. Shen HY, Singer P, **Lytle N**, Wei CJ, Lan JQ, Williams-Karnesky RL, Chen JF, Yee BK, and Boison D. (2012)

Adenosine augmentation ameliorates psychotic and cognitive endophenotypes of schizophrenia. ***J Clin Invest.*** 122(7):2567-2577.

26. Lusardi TA, **Lytle NK**, Szybala C, Li T, and Boison D. (2012) Caffeine prevents acute mortality after TBI in rats without increased morbidity. ***Exp Neurol.*** 234(1):161-168.

27. Li T, **Lytle N**, Lan J, Sandau US, and Boison D. (2011) Local disruption of glial adenosine homeostasis in mice associates with focal electrographic seizures: a first step in epileptogenesis? ***Glia.*** 60(1):83-9

ORAL PRESENTATIONS

Local

01/2025 *Invited speaker*, 14th Annual LaBahn Pancreatic Cancer Symposium, Milwaukee WI
"Preventing disease progression through dismantling pro-metastatic inflammatory processes"
Invited speaker, Arteriosclerosis, Thrombosis, and Vascular Biology seminar series, MCW
Approaches for understanding chemotherapy-associated cancer driving processes"

05/2024 *Invited speaker,* MCW Breast Cancer Disease Oriented Team lecture series, Milwaukee WI
"Investigating the impact of therapy-induced mammary epithelial cell fate switching in tumorigenesis"

01/2024 *Invited speaker,* 13th Annual LaBahn Pancreatic Cancer Symposium, Milwaukee, Wisconsin
"Targeting the pro-metastatic liver niche"

11/2023 *Invited speaker,* MCW Cancer Center Cancer Research Forum, Milwaukee WI
"Defining and targeting the pro-metastatic liver niche"

10/2023 *Invited speaker,* MCW Department of Pharmacology Seminar Series, Milwaukee WI
"Mammary epithelial cell reprogramming in injury and tumorigenesis"

10/2023 *Invited speaker,* MCW Department of Biochemistry Seminar Series, Milwaukee WI
"Mechanisms for defining the pre-metastatic niche"

08/2023 *Invited speaker*, MCW Pancreas Disease Oriented Team lecture series, Milwaukee WI
"Intercepting pancreatic cancer metastasis by targeting the pre-metastatic niche"

03/2023 *Invited speaker,* MCW Obstetrics & Gynecology Disease Oriented Team lecture series, Milwaukee WI
"The molecular state of mammary epithelial cells determines breast cancer susceptibility"

02/2023 *Invited speaker,* MCW Breast Cancer Disease Oriented Team lecture series, Milwaukee WI
"Mammary epithelial cell states in injury and tumor progression"

11/2022 *Invited speaker,* Pancreatic Cancer Scientific Retreat, Milwaukee WI
"Chemotherapy-associated liver injury enhances pancreatic cancer liver metastasis"

08/2022 *Invited speaker,* Cancer Center Trainee Research Seminar, Salk Institute, La Jolla CA
"The molecular landscape of mammary epithelial cell fate switching"

10/2021 *Selected speaker,* Salk Science at the Seaside symposium, La Jolla CA
"Chemotherapy-induced liver damage promotes pancreatic cancer liver metastasis"

08/2020 Cancer Center T32 Trainee Research Seminar, Salk Institute for Biological Studies, La Jolla CA
"Mammary epithelial cell states in obesity and menopause"

09/2019 *Invited speaker,* 2019 Biomedical Sciences Graduate Program annual retreat, Palm Springs CA
"Uncovering the tumor landscape to overcome therapy resistance"

10/2018 *Selected speaker,* Cancer Center T32 Trainee Research Seminar, Salk Institute, La Jolla CA
"A multiscale map of the stem cell state in pancreatic cancer"

06/2018 Pharmacology Department Seminars in Pharmacology, University of California San Diego, La Jolla CA
"A Genome-Wide CRISPR Screen Identifies Pancreatic Cancer Stem Cell Vulnerabilities"

05/2018 *Invited speaker*, Pharmacological Sciences Department Retreat, La Jolla CA
"Identification and Targeting of Pancreatic Cancer Stem Cells"

12/2017 *Invited speaker*, CRISPR Screening Workshop, Sanford Consortium for Regenerative Medicine, La Jolla
"Identification of Pancreatic Cancer Stem Cell Dependencies Using a Genome-Wide CRISPR Screen"

10/2017 *Invited speaker*, Cancer Genomics Cross Laboratory Meeting, Moores Cancer Center, La Jolla CA
"Delineation and Targeting of Pancreatic Cancer Stem Cell Networks"

10/2016 Pharmacology Department Seminars in Pharmacology, University of California San Diego, La Jolla CA
"Pancreatic Cancer Therapy Resistance is Driven by the Stem Cell Determinant Musashi"

09/2015 Pharmacology Department Seminars in Pharmacology, University of California San Diego, La Jolla CA

"Imaging Stem Cell Signals in Pancreatic Cancer"

09/2015 *Invited speaker*, BMS Graduate Program Pharmacology orientation, UCSD, La Jolla CA
"Unraveling Heterogeneity of Therapy Resistance in Pancreatic Cancer"

06/2015 *Invited speaker*, Pharmacology Department Annual Retreat, San Diego CA
"Malignant Progression of Pancreatic Adenocarcinoma is Critically Dependent on Musashi"

06/2014 Pharmacology Department Seminars in Pharmacology, University of California San Diego, La Jolla CA
"Musashi is Required for the Development and Progression of Pancreatic Cancer"

05/2010 Biology Department Senior Research Presentations, Willamette University, Salem OR
"Investigation the Function of Stathmin in Axonal Transport"

04/2010 *Invited speaker,* 10th Anniversary Student Scholarship Recognition Day, Willamette University, Salem OR
"Investigation the Function of Stathmin in Axonal Transport"

12/2009 Science Collaborative Research Program capstone presentations, Willamette University, Salem OR
"The microtubule regulator Stathmin is required for axonal transport in *Drosophila melanogaster*"

Regional

04/2022 *Invited speaker,* Cancer Center Council (C3) PCGR monthly lecture series, SBP Institute, La Jolla CA
"Liver damage enhances pancreatic cancer liver metastasis"

09/2018 *Invited speaker*, Cancer Center Council (C3) PCRG monthly lecture series, SBP Institute, La Jolla CA
"RORγ is a novel regulator of stem cell signals in pancreatic cancer"

10/2009 MJ Murdock Charitable Trust Regional Conference on Undergraduate Research, Spokane WA
"The Microtubule Regulator Stathmin is Required for Axonal Transport in *Drosophila melanogaster*"

National

01/2025 *Invited speaker,* Pancreatic Cancer Detection Consortium Virtual Meeting
"Approaches for preventing metastasis in patients with early-stage pancreas cancer"

05/2024 *Invited speaker,* PancMidwest Meeting, University of Chicago, Chicago IL
"Chemotherapy shapes the metastatic liver niche through induction of tissue repair programs"

07/2023 *Invited speaker,* Hope Funds for Cancer Research Scientific Meeting, Newport, RI
"Oxaliplatin treatment induces a pre-metastatic liver niche by triggering secretion of Timp1"

05/2023 *Selected speaker,* Midwest Tumor Microenvironment Meeting, Purdue University, West Lafayette IN
"Oxaliplatin treatment induces a pre-metastatic liver niche by triggering secretion of Timp1 by liver endothelial cells"

08/2022 *Selected speaker,* Mechanisms & Models of Cancer Meeting, Cold Spring Harbor Laboratory, NY
"Obesity and menopause synergize to reprogram mammary epithelium and enhance breast tumorigenesis"

11/2021 *Selected speaker*, American Pancreatic Association Annual Meeting, Miami FL
"Liver damage enhances pancreatic cancer liver metastasis"

10/2018 *Invited speaker*, Legacy Research Institute Seminar Series, Legacy Research Institute, Portland OR
"Therapeutic targeting of stem cell signals blocks pancreatic cancer progression"

08/2018 Stand Up To Cancer Pancreatic Cancer Mini-Summit, Philadelphia PA
"Targeting the pancreatic cancer stem cell state: CSF1R and RORγ"

06/2017 Cold Spring Harbor Laboratories Workshop on Pancreatic Cancer, NY
"Tumor Cell Heterogeneity and Chemoresistance: Lessons from Pancreatic Cancer Stem Cells"

International

02/2017 *Selected speaker,* Gordon Research Seminar on Stem Cells and Cancer, Lucca Italy
"Stem Cell Signals Drive Pancreatic Cancer Therapy Resistance"

11/2016 *Invited speaker*, Stand Up to Cancer, Pancreatic Cancer Research Dream Team UK, London England
"Targeting Stem Cell Signals in Pancreatic Cancer"